Table 1 Details of patients undergoing serological test for syphilis

Clinical diagnosis	No of samples (%)	Positive for syphilis serology	Positive for HIV
Previous pregnancy loss*	89/281 (31.6)	16/89 (17.9%)	0/16 (0%)
Vaginal discharge	101/281 (55.8)	9/101 (8.9%)	1/9 (11.1%)
Genital growth	49/281 (17.4)	6/49 (12.2%)	1/6 (16.6%)
Genital ulcer	42/281 (14.9)	17/42 (40.47%)	4/17 (23.5%)

^{*}Intrauterine death, still birth, repeated abortions.

positive for HIV antibody. This was highly significant (p<0.001, Fisher's exact test). Presence of HIV antibody was associated with genital ulcer in 23.5% women, followed by genital growth and vaginal discharge in 16.6% and 11.1% respectively.

There is a higher prevalence of STD and HIV infection among men compared with women. HIV seropositivity has been associated with a reactive serological test for syphilis among males. This could be probably due to higher percentage of male attendance in STD clinics.6 We therefore undertook this study to evaluate if some association exists between syphilis and HIV among nonpregnant women attending the gynaecology clinic, as well as the STD clinic. Untreated STDs, especially those with ulcerative disease, can enhance both susceptibility of a person to HIV infection as well as infectivity of HIV positive individual. Breach in the epithelial surface of a genital ulcer may be an important factor in the transmissibility of HIV. This is evident from our results where incidence of positive serology for HIV was highest among women with genital ulcer (23.5%). Our study demonstrates a significant association between positive serology for syphilis and presence of HIV infection. We feel that the diagnosis of syphilis in nonpregnant women may act as a marker to detect the presence of HIV infection.

M VAJPAYEE Department of Microbiology, All India Institute of Medical Sciences, New Delhi, India

> N MALHOTRA Department of Obstetrics and Gynaecology

> > P SETH Department of Microbiology

D TAKKAR Department of Obstetrics and Gynaecology

R M PANDEY
Department of Biostatistics

Correspondence to: Madhu Vajpayee, MD, Department of Microbiology, All India Institute of Medical Sciences, New Delhi-110029, India

- 1 UNAIDS/WHO group on global HIV/AIDS and STD surveillance. Report on the global HIV/AIDS epidemic. Geneva: WHO, 1997.
- Mehendale SM, Shephered MÉ, Dvekar AD, et al. Evidence for high prevalence and rapid transmission of HIV among individuals attending STD clinic in Pune, India. Ind J Med Res 1996;104:327–35.
 Wasserhert JN. Epidemiological synergy: inter-
- 3 Wasserhert JN. Epidemiological synergy: interrelation between human immunodeficiency virus infection and other sexually transmitted diseases. Sex Transm Dis 1992;19:61–77.
- 4 Thappa DM, Singh S, Singh A. HIV infection and sexually transmitted disease in a referral STD centre in south India. Sex Transm Inf 1999;75:191.
- 1993, 13.131.

 S National AIDS Control Organisation (NACO), Ministry of Health and Family Welfare, Government of India, Surveillance for HU infection/AIDS case in India (1986–1999).
- 6 Jacob M, John TJ, George S, et al. Increasing prevalence of human immunodeficiency virus infection among patients attending a clinic for sexually transmitted disease. Ind J Med Res 1995;101:6–9.

Immune reconstitution CMV pneumonitis

EDITOR,-A 41 year old white homosexual man presented in late July 1999 with a 5 day history of exertional dyspnoea, nonproductive cough, fever with sweats, and anorexia. An empirical course of broad spectrum antibiotics did not improve his symptoms and Sao, remained ≤95% on air at rest. The chest radiograph showed non-specific abnormalities. He had been found to be HIV-1 antibody positive in August 1991; cutaneous Kaposi's sarcoma defined AIDS in June 1992. In May 1995 biopsy confirmed cytomegalovirus (CMV) oesophagitis and colitis were treated with intravenous ganciclovir for 2 weeks; no maintenance therapy was given. At this time the CD4 count was 130 cells ×106/l. In October 1996 the patient had Pseudomonas aeruginosa pneumonia. He had a complex antiretroviral history, having taken combinations of reverse transcriptase inhibitors and protease inhibitors. He had discontinued all antiretroviral therapy in January 1999 as therapy had failed to maintain CD4 counts and HIV viral load had risen: co-trimoxazole primary Pneumocystis carinii pneumonia prophylaxis had been continued. In early June 1999 HIV viral load had risen to 223 000 copies/ml and CD4 count had fallen to 70 cells ×106/l. Two weeks before the onset of respiratory symptoms the patient had recommenced antiretroviral therapy with d4T, 3TC, and amprenivir/ saguinavir. Four weeks after starting antiretroviral therapy viral load had fallen to 1500 copies/ml and CD4 had risen to 170 cells ×106/μl. A computed tomography (CT) scan of the thorax 4 weeks after the onset of respiratory symptoms and 6 weeks after starting antiretroviral therapy showed focal areas of ground glass shadowing, largely in the left upper lobe but also involving other lobes; in addition, chronic changes resulting from the previous episode of pneumonia were noted, including multifocal fibrotic change with thickened interlobular septae, cystic air spaces, and minor bronchiectasis involving all lobes. Repeat viral load at this time = 200 copies/ml and CD4 = 160 cells ×106/l. At bronchoscopy, performed after 8 weeks of antiretroviral therapy, the endobronchial appearances were normal. Bronchoalveolar lavage (BAL) was performed from the left upper lobe. Analysis of BAL fluid revealed a lymphocytic reaction; many cells had intranuclear/cytoplasmic inclusions typical of CMV infection. In situ hybridisation for CMV was positive. Staining and culture for bacteria, mycobacteria, P carinii and other fungi were negative. Intravenous ganciclovir 10 mg/kg per day was given for 21 days, in addition, antiretroviral therapy and cotrimoxazole were continued. With this there was a rapid defervescence of fever, a reduction in exertional dyspnoea and improvement in Sao2 to ≥98% on air. Repeat CT of the thorax after 3 weeks of intravenous ganciclovir showed an improvement in ground glass shadowing and persistence of the chronic

changes. The patient was subsequently maintained on oral ganciclovir.

The diagnosis of CMV pneumonitis was made by identifying CMV as the sole pathogen in BAL fluid and the improvement in symptoms, Sao₂, and CT appearances with ganciclovir as monotherapy. This diagnosis was made in the context of a rapidly falling viral load and an increase in CD4 count indicating partial immune reconstitution.

Partial restoration of cell mediated immunity induced by antiretroviral therapy, as shown by recovery of part of CD4 T cell reactivity to memory antigens, 12 may cause development of sufficient inflammatory responses to produce symptoms and signs in patients latently infected with opportunistic infections. Reactivation mycobacterial lymphadenitis, 3 cryptococcal meningitis, 4 and CMV retinitis 56 have been described. The case described here suggests CMV pneumonitis should be added to the list of immune reconstitution phenomena.

R F MILLER P J SHAW I G WILLIAMS

Department of Sexually Transmitted Diseases, Royal Free and University College Medical School, Mortimer Market Centre, Mortimer Market, off Capper Street, London WC1E 6AU

- 1 Autran B, Garcelain G, Li TS et al. Positive effects of combined antiretroviral therapy on CD4+ T cell homeostasis and function in advanced HIV disease. Science 1997;277:112–16.
- advanced rify disease. Science 1991;277:112–10.

 2 Komanduri KV, Wiswanathan MN, Wieder ED, et al. Restoration of cytomegalovirus—specific CD4+ T-lymphocyte responses after ganciclovir and highly active antiretroviral therapy in individuals infected with HIV-1. Nat Med 1998;4:953–6.
- 3 Race EM, Adelson-Mitty J, Kriegal GR, et al. Focal mycobacterial lymphadenitis following initiation of protease-inhibitor therapy in patients with advanced HIV-1 disease. Lancet 1998;351:252–5.
- 4 Woods ML, MacGinley R, Eisen DP, et al. HIV combination therapy: partial immune restitution unmasking latent cryptococcal infection. AIDS 1998;12:1491–4.
- 5 Jacobson MA, Zengans M, Pavan PR et al. Cytomegalovirus retinitis after initiation of highly active antiretroviral therapy. Lancet 1997;349:1443-5.
- 6 Karavellas MP, Plummer DJ, MacDonald JC et al. Incidence of immune recovery vitritis in cytomegalovirus retinitis patients following institution of successful highly active antiretroviral therapy. J Infect Dis 1999;179:697–700.

Accepted for publication 26 November 1999

BOOK REVIEWS

Common Gynaecological Problems. Ed by Patricia Wilson. Pp 312; Price £24.95. Oxford: Blackwell Science, 1999. ISBN 0-632-05174-4.

A book with a title such as this one makes it difficult for the author to decide what to exclude. This book certainly fulfils its major objective of providing an easy reference manual for the diagnosis and management of common gynaecological conditions. It deals with almost all the gynaecological conditions that could be encountered in the community and the common gynaecological problems in hospital medicine. Overall, the topics covered are well presented with special points highlighted.